## **ABSTRACT**

A method for performing a mask design layout resolution enhancement includes determining a level of correction for the design layout for a predetermined parametric yield with a minimum total correction cost. The design layout is corrected at the determined level of correction based on a correction algorithm if the correction is required. In this manner, only those printed features on the design layout that are critical for obtaining the desired performance yield are corrected, thereby reducing the total cost of correction of the design layout.

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